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(54) Title: COMPOSITIONS CONTAINING CREATINE IN SUSPENSION

(57) Abstract: Disclosed is a composition for human consumption, comprising creatine suspended in an edible supporting matrix.

a suspension most readily.

### CONCLUSIONS

When suspended, creatine is stable at room temperature at pHs where it would normally be degraded to creatinine if in solution.

To avoid the unsightly scum being formed it is suggested that creatine is suspended in spreads (such as cheese spread, caviar spread [popular in Scandinavia], smoked fish spread [also popular in Scandinavia - e.g. buckling paste]) contained in tubes. Since usually these are stored at temperatures below ambient (e.g. refrigerated at 4-6°C) this would further enhance stability upon storage.

### Example 2

This example describes the detailed formulation of an acidic composition in accordance with the invention.

The composition takes the form of a dry powder, which is to be suspended in an edible matrix to constitute a foodstuff comprising creatine and Aloe Vera extract.

### Ingredients

Dextrose Monohydrate	300g
Citric Acid	32g
Pectin (stabilizer)	6.0g
Salt	5.0g
Trisodium Citrate	5.0g
Beta Carotene	3.0g
Potassium Chloride	2.9g
Grapefruit Flavour	2.9g
Tricalcium Phosphate	2.1g
Heavy Magnesium Carbonate	2.1g
Vitamin Premix	1.8g

Lemon Flavour	1.4g
Orange Flavour	1.4g
Aspartame	1.0g
Creatine Monohydrate	88g
Lyophilized Aloe Vera extract	7.6g

About 63g of the above mixture when suspended in 1 litre of matrix provides, per 150ml serving, about 3g creatine, 0.6g Aloe Vera extract, (equivalent to 120ml juice), energy kJ 203 (kcal 48, assuming a zero calorie content for the supporting matrix), 11.1g carbohydrate, 156 mg chloride, 100mg sodium, 52mg potassium, 26mg calcium, 19.5mg magnesium, 13mg phosphorus, vitamins (vitamin E 3.4mg, vitamin C 16.2mg, Thiamin 0.3mg, Riboflavin 0.4mg, Niacin 5.0mg, vitamin B6 0.4mg, Folic acid 85 g, vitamin B12 0.9 g, Biotin 0.08mg and Pantothenic acid 2.2mg) and traces of protein, fat, and fiber and has a pH of about 3.8.

### Example 3

This example relates to another embodiment of the invention.

The formulation is as in example 2 above, except that the 300g dextrose monohydrate is omitted and the aspartame content is increased to 2.5g to compensate. When 5.3g of this formulation is suspended in 250ml of matrix, it provides an almost calorie free food (assuming a non-calorific supporting matrix is used) containing creatine and electrolytes which is nutritionally useful to those wishing to lose or maintain their weight.

### Example 4

The pH of various foodstuffs was analysed, according to the method described in Example 1 above. The results are shown below. Each of these foodstuffs could potentially be used as an edible supporting matrix in a composition in accordance with the invention, by suspending therein a suitable amount of solid creatine. Suitable serving sizes (giving a creatine dose of between 1 and 5gms creatine) are also indicated.

<u>Analysis of foodstuffs</u>	<u>pH</u>	<u>Serving (gms)</u>
Dolmio Sauce for Bolognese (original)	3.97	200